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| Notice of Allowability | Application No. | Applicant(s) |
| | 10/005,784 | KUO, SHIH-ZHENG |
| | Examiner | Art Unit |
| | Houshang Safaipour | 2625 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to after final amendment of 6/30/06.
2. The allowed claim(s) is/are 3,4,8-11,16 and 26.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

[Signature]
 JEROME GRANT
 PRIMARY EXAMINER

Reasons for Allowance

Claims 1, 2, 5-7, 12-15, 17-25 and 27-29 are cancelled.

Claims 3, 4, 8-11, 16 and 26 are allowed.

This is examiner's statement of reasons for allowance.

Claims 3, 4 and 16 are allowed for the reason that the prior art does not teach in claimed combination calculating a computed pixel value including:

if a first light-sensing cell of a first sensing module includes a reference digital data and a second light-sensing cell of a second sensing module and the first light-sensing cell having some overlap in a forward scanning direction, digital data of a pixel in the region in the second light-sensing cell having no overlap with the first light-sensing cell is obtained in accordance with the following relationship:

$$A(X)=F(X)*N-A(X-1)-A(X-2)-\dots-A(0)*(N-X); \text{ and}$$

where X comprises a desired pixel, N comprises a number of pixels included in a light-sensing cell, A(X) comprises digital data corresponding to an Xth pixel, A(1) comprises digital data of the first pixel, and F(X) comprises digital data captured during the scanning operation including pixels captured by the light-sensing cell are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-11 and 26 are allowed for the reason that the prior art does not teach in claimed combination a method of improving modulation transfer function through scanning an object with a stagger sensor that comprises a first light sensing cell of a first sensing module and a second light sensing cell of a second sensing module having a first end at substantially the same

position along the axis and wherein the first light sensing cell has a second end in a different position along the axis than a second end of the second light sensing cell. The method further comprises obtaining digital data of a first pixel using a difference in scanning region between the first light sensing cell and the second light sensing cell and processing digital data of a plurality of subsequent pixels after a scanning of the object according to the digital data of the first pixel.

The features identified, in combination with other claim limitations, are neither suggested nor discussed by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipour whose telephone number is (571)272-7412. The examiner can normally be reached on Mon.-Fri. from 6:00am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Houshang Safaipour
Patent Examiner
Art Unit 2625
July 17, 2006


JEROME GRANT
PRIMARY EXAMINER